IN THE CLAIMS:

Please amend the claim as follows:

1. (Currently Amended) A TO-can type optical module comprising:

a stem;

a sub-mount arranged in the stem;

a laser diode (LD) mounted on the sub-mount;

a photodiode (PD) mounted substantially parallel to the LD and said PD mounted on the submount, said PD having an inclined light incident surface, said PD being arranged for detecting light emitted from a back face of the LD converting light emitted from the LD to current; and

a plurality of leads extended through the stem, said leads electrically being connected to the sub-mount and said leads aligned a row.

2. (Original) The TO-can type optical module of claim 1, wherein the sub-mount is arranged substantially perpendicular to an upper surface of the stem.

3. (Previously Amended) The TO-can type optical module of claim 1, further comprising a bias-tee arranged in the sub-mount with the LD, said bias-tee superposing an RF signal onto a DC current of the LD.

4. (Original) The TO-can type optical module of claim 3, further comprising a coplanar waveguide (CPW) and a matching resistor arranged in the sub-mount for transmitting the RF signal without distortion.

5. (Original) The TO-can type optical module of claim 3, further including an RF choke comprising a first inductor electrically connected to block the RF signal from a DC current path.

6. (Original) The TO-can type optical module of claim 5, further comprising a damping resistor electrically arranged in parallel with the first inductor.

7. (Original) The TO-can type optical module of claim 5, further comprising a second inductor connected electrically between the LD and the PD for providing RF isolation of the LD from the PD.

8. (Original) The TO-can type optical module of claim 7, wherein one of the first inductor and the second inductor comprises a spiral thin-film inductor.

9. (Original) The TO-can type optical module of claim 1, wherein the LD includes a p-type electrode bonded by having its p-side facing up to the sub-mount.

10. (Original) The TO-can type optical module of claim 1, wherein the sub-mount is formed of a ceramic material.

11. (Original) The TO-can type optical module of claim 10, wherein the ceramic material comprises AlN.

12. (Original) The TO-can type optical module of claim 1, wherein the LD and the PD are die-bonded onto the sub-mount by a solder pattern.

13. (Original) The TO-can type optical module of claim 1, wherein the plurality of leads comprise a first lead connected to an anode of the LD, a second lead connected to a cathode RF terminal of the LD, a third lead connected to a cathode of the PD, a fourth lead connected to an anode of the PD, and a fifth lead connected to a cathode DC terminal of the LD.

14. (Original) The TO-can type optical module of claim 13, wherein the first and third leads are commonly connected.

15. (Original) The TO-can type optical module of claim 1, wherein the plurality of leads are arranged in line.

16. (Currently Amended) A TO-can type optical module comprising:

a stem;

a sub-mount arranged in the stem;

a laser diode (LD) mounted on the sub-mount, said LD having a front and a back face;

a photodiode (PD) mounted substantially parallel to the LD and said PD mounted on the submount, said PD having an inclined light incident surface, said PD being arranged for detecting light emitted from the back face of the LD to convert light emitted from the LD into current;

a bias-tee arranged in the sub-mount for superposing an RF signal on the DC current of the LD; and

a plurality of leads extended through the stem, said leads being connected electrically to the sub-mount and said leads aligned in a row.

17. (Original) The TO-can type optical module of claim 16, further comprising a coplanar waveguide and a matching resistor arranged in the sub-mount for transmitting the RF signal without distortion, and an RF choke comprising an inductor arranged in a DC current path to block the RF signal from the DC current.

18. (Currently Amended) A method for providing a TO-can type optical module comprising the steps of:

(a) providing a stem;

(b) arranging a sub-mount in the stem substantially perpendicular to an upper surface of the stem;

(c) arranging a laser diode (LD) on the sub-mount;

(d) arranging a photodiode (PD) substantially parallel to the LD and said PD mounted on the submount, said PD having an inclined light incident surface, said PD being arranged for detecting light emitted from a back face of the LD to convert light emitted from the LD to current; and

(e) arranging a plurality of leads extended through the stem, said leads electrically being connected to the sub-mount and said leads aligned in a row.

19. (Original) The method according to claim 18, further comprising:

(f) arranging a coplanar waveguide (CPW) and a matching resistor in the sub-mount for transmitting the RF signal without distortion.

20. (Original) The method according to claim 19, further comprising:

(g) arranging a bias-tee in the sub-mount with the LD, said bias-tee superposing an RF signal onto a DC current of the LD.

21. (Previously Amended) The method according to claim 20, further comprising:

(h) arranging an RF choke comprising a first inductor electrically connected to block the RF signal from the DC current path.

22. (Original) The method according to claim 21, further comprising:

(i) electrically arranging a damping resistor in parallel with the first inductor.

23. (Original) The method according to claim 22 further comprising:

(j) electrically arranging a second inductor between the LD and the PD for providing RF isolation of the LD from the PD.